

The VacScene

Public Health – Seattle & King County (PHSKC) Immunization Newsletter Volume 13, Number 3 Summer 2007

What's Inside?

ACIP updates recommendation for the prevention of varicella.....	1
Vaccines For Children (VFC) program news ..	2
Vaccinated overseas: guidance for immunizing foreign-born children.....	3
2007-'08 WA State vaccine requirements for school.....	3
Mark your calendars for CDC's immunization update 2007.....	4
New hepatitis B brochure available.....	4
PHSKC is moving!.....	4

The VacScene

Public Health - Seattle & King County Communicable Disease, Epidemiology and Immunization Section

Jeffrey S. Duchin, M.D., Chief Communicable
Disease Epidemiology & Immunization Section
401 Fifth Avenue, Suite 900
Seattle, WA 98104-2333
Phone: 206-296-4774 Fax: 206-296-4803
Email: lauren.greenfield@kingcounty.gov
Website: www.kingcounty.gov/health

The VacScene is a publication of Public Health – Seattle & King County written for health professionals. Content is consistent with the most current recommendations from the Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP).

Publication Staff

Editor: Lauren S. Greenfield
Contributors: Linda Capriotti, Julie Choudhuri,
Betsy Hubbard, Darren Robertson



ACIP Updates Recommendation for the Prevention of Varicella

On June 22, 2007, the ACIP adopted new recommendations regarding the use of live, attenuated varicella vaccine. **The main change is for routine vaccination (and catch-up) with a 2-dose varicella vaccine series in children <13 years of age.** (To view the full document, go to: <http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf>). Pre- and post-licensure studies have demonstrated that one dose of single-antigen varicella vaccine is approximately 85% effective in preventing varicella. However, outbreaks (albeit with milder disease) have continued to occur in highly vaccinated populations using the one-dose regimen. The second dose of varicella vaccine is intended to provide protection to the 15%--20% of children who do not respond adequately to the first dose. Data from a randomized controlled trial indicated that the risk for breakthrough disease was 3.3-fold lower among children who received two doses than it was among children who received one dose. In addition, a two-dose series is 100% effective in preventing *severe* varicella disease.

Recommendation highlights:

- Implementation of a routine 2-dose varicella vaccination program:**
 - Children:** Administer the first dose at age 12-15 months and the second dose at 4-6 years. (Note: A 2nd dose received prior to age 4-6 years is valid if ≥ 3 months interval between doses 1 & 2.)
 - Healthy adolescents and adults ≥ 13 years of age** without evidence of immunity: Administer 2 doses 4-8 weeks apart. Longer intervals are acceptable.
- Second-dose catch-up schedule** for children, adolescents and adults:
 - Children <13 years:** Administer 2nd dose ≥ 3 months following the first. (Note: If 2nd dose was administered at least 28 days following the first, the dose does not need to be repeated.)
 - Persons ≥ 13 years** – Administer 2nd dose ≥ 28 days following 1st dose. (Note: Intervals longer than the minimum recommended interval are acceptable).
- HIV-infected persons:** Children and adults with HIV are more likely to suffer from complications due to varicella. Eligible HIV-infected children and adults should receive two doses of varicella vaccine ≥ 3 months apart. For details, go to: <http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf>
- The ACIP recommends prenatal assessment of varicella immunity and postpartum 2-dose vaccination** of all varicella-susceptible women. Women without evidence of immunity who are planning to become pregnant should be vaccinated and counseled to avoid pregnancy for one month following each dose of vaccine. Prenatal and perinatal infection with wild varicella virus can result in congenital varicella syndrome.
- Outbreak control:** Offering varicella vaccine during outbreaks in such settings as child care facilities, schools, or institutions, can provide protection to persons not yet exposed and shorten the duration of the outbreak.
 - Persons receiving the 1st or 2nd dose as part of outbreak control may be readmitted to school immediately.** Two-dose vaccination is recommended for optimal protection.
 - Persons without evidence of immunity who remain unvaccinated during the outbreak should be excluded from the setting until 21 days after rash onset of the last varicella case.**
- ACIP recommends expanding the school requirements** for varicella immunity to all grade levels. (Note: For 2007-08, WA State requires one dose of varicella vaccine for entry to Kindergarten, 1st and 6th grades only).
- New criteria for evidence of immunity** were also added to the recommendations, requiring diagnosis and/or verification of history of varicella by a health care provider. (Note: Currently, WA State allows parent-reported history of disease as evidence of immunity).

Vaccines For Children (VFC) Program News

2006 VFC Award Winners!

Five VFC provider practices in King County have been selected to receive awards from the Washington State Department of Health Immunization Program/CHILD Profile. The practices are: **East Hill Multicare Clinic** (Kent), **Holly Park Medical Clinic** (South Seattle), **Evergreen Health Care Access Program** (Kirkland), **Pediatric Associates** (Sammamish), and **Snoqualmie Valley Hospital's North Bend Medical Clinic**.

Award recipients were chosen based on overall performance as measured during a Public Health—Seattle & King County VFC Program site visit. Each practice demonstrated excellence in vaccine storage and handling, vaccine administration and documentation, staff preparation and knowledge, and immunization up-to-date rates exceeding ninety percent.

Each clinic receives a plaque and framed certificate signed by the state Assistant Secretary of Health, Patty Hayes, and the state Immunization Program Manager, Janna Bardi. Congratulations!

Vaccine Return Process

McKesson continues to modify and refine the vaccine return process published in the Spring 2007 issue of the *VacScene*:

- ◆ A Vaccine Return Form must be completed for each return; include PIN (181xxx). "LHJ" is Seattle-King County.
- ◆ Fax the Return Form to the Washington State Department of Health (DOH) two days before returning vaccine (360-236-3597). DOH is not confirming faxes; wait at least two days following your faxed return form to send your package.
- ◆ To return expired flu vaccine, be sure to use the return form specifically for flu vaccine.
- ◆ Include a copy of the Return Form with the returned vaccine and fax a copy to Public Health at 206-205-5780.
- ◆ Use a shipping carton received from McKesson; you will find a US Postal Service Return label or UPS Return Service label, provided with the carton. All returns should be sent to the vaccine distributor, McKesson. If you do not have a McKesson carton, wait for your next vaccine delivery and use that carton.
- ◆ The carton can be picked up by a US Mail carrier or UPS courier on their regular rounds, as appropriate. To avoid a pick-up fee, do not *schedule* a pickup with UPS.
- ◆ To minimize impact on daily vaccine order processing, please return spoiled and expired vaccines after the 15th of each month.

Vaccine Requests

As many of you know, the new vaccine distribution process has led to some changes. Please keep the following in mind:

- ◆ Vaccine requests are accepted throughout the month. Minimize the number of separate requests by ordering **carefully and completely**, including frozen vaccine.
- ◆ **Refrigerated vaccines** typically ship **within seven business days** of receipt of order. Merck's contract with the CDC allows them **15 business days** to ship orders for **frozen vaccines**. Most shipments deliver Tuesday-Thursday.
- ◆ Three things that may delay the processing of your vaccine request: (1) an overdue usage report, (2) an overdue temperature log, and (3) an incomplete or out-of-date vaccine

request form.

- ◆ Vaccine Request forms must be complete. List "Doses Used Last Month" and "Doses On Hand" for all vaccines, even those you are not ordering. Each request is reviewed on receipt, and your request may be increased or decreased based on the inventory information you provide. You may estimate the number of "Doses On Hand" but the number is important, particularly for mid- or late-month requests, because the previous month's Usage Report will, by then, be an inaccurate record of your inventory.
- ◆ The table below is intended as a guide. Some clinics/practices may wish to order more or less frequently depending on storage capacity. Public Health encourages the purchase of full-size refrigerators to accommodate the growing list of recommended childhood vaccines and their increasingly bulky packaging.

Usage per Year	Order Frequency	Number of Doses Used/Month
Extra High (>4800 doses)	1-2 per month (12-24 per year)	400 and above
High (1800-4800 doses)	Once per month (12 per year)	150-399
Medium (480-1800 doses)	Every other month (6 per year)	40-149
Small (<480 doses per year)	Quarterly (4 per year)	Up to 40

- ◆ Usage can be difficult to predict. March-April, August-September and November are generally the busiest months for vaccination. Adding or losing a physician or nurse practitioner will affect the amount of vaccine you need. Refer to the table above as a goal. However, "extra" requests are preferable to clinics/practices not having enough vaccine to meet patient needs. If you notice that you are almost out of one vaccine, check all other vaccines as well before placing an extra request.
- ◆ Together we can work out a usage/ordering pattern to meet your needs and minimize the need for extra, emergency shipments.

Availability of MMR-V (ProQuad®)

Because of an issue with the bulk manufacturing process for its varicella-zoster virus (VZV)-containing vaccines, Merck has decided to concentrate on production of the component vaccines, VARIVAX® and M-M-R®. This is to ensure that the greatest number of doses of VZV-containing vaccines can be made available.

This situation **does not affect** the quality of Merck's VZV-containing vaccines currently on the market, those that are ready for release to the market, or those that will be manufactured from existing VZV-bulk.

ProQuad is no longer available for order as of June 2007, through the end of the year. Existing orders and backorders placed in May for ProQuad are expected to be filled through August. If you have questions, please call your Merck Representative or the Merck National Service Center at 800-MERCK-90 (800-637-2590).

Vaccinated Overseas- Guidance for Immunizing Foreign-Born Children

A Sudanese refugee presents with her mother to your office without a medical history or immunization record. In the next room, parents await immunizations for their newly adopted toddler from Eastern Europe. Do these scenarios seem familiar? How do you determine which foreign vaccines are valid, when you should draw titers, and when to start all over?

Vaccines required for U.S. immigration:

An application for an immigrant visa must include proof of vaccination or documentation of immunity to certain diseases. Required vaccines include measles, mumps, rubella, polio, tetanus, diphtheria, pertussis, *Haemophilus influenzae* type b (Hib), hepatitis B, varicella, pneumococcal, and influenza. Refugees must comply only when they are applying to change their refugee status (i.e. permanent residency), usually after 15 months from arrival to the U.S. Internationally adopted children <11 years of age are an exception to vaccine requirements. Adoptive parents sign a waiver indicating that their child will receive ACIP recommended vaccinations within 30 days of entering the U.S. Any child, regardless of residency status, will be obligated to comply with Washington State's requirements for childcare and school attendance.

Vaccines outside the U.S.:

The majority of vaccines manufactured world-wide are of adequate potency, adhering to international quality control standards. However, immunization schedules differ and the availability of combined vaccines varies by country. Many countries utilize monovalent measles vaccine and do not give a rubella or mumps component.

Immunization records and titers:

Children from refugee camps may have had medical care including immunizations, but no accompanying records. Children adopted from orphanages may have records, but they could be unreliable. This has been shown especially true for children from orphanages in China, Russia, and Eastern Europe.¹ A measles vaccine may be transcribed as an MMR. Newer data suggest higher predictability of foreign records and immunization status.²

Some general guidance for immunizing refugee and immigrant children:

1. Accept only written records with dates as evidence of immunization. A history of disease is usually unavailable and may be unreliable.
2. Vaccines administered outside the U.S. are generally considered valid when the doses as well as the minimum ages and intervals according to the U.S. schedule have been met. Most foreign-born children *will not* have received Hib, pneumococcal, hepatitis A, rubella, mumps, and varicella vaccines.
3. The simplest approach for a child with no or questionable vaccination records is to revaccinate. This method avoids the need to interpret serologic tests; and some tests cannot document protection against infection. There is no evidence that administration of vaccines to someone who is already immune is harmful. However, multiple doses of DTaP or Td may result in increased risk for a severe local reaction, and the provider may wish to consider titers for antibodies to tetanus and diphtheria toxins.

4. An alternative approach is serologic testing and creating an individualized schedule. Additional testing information, by each vaccination, may be found in ACIP's *General Recommendations on Immunization* (published in the *MMWR* December 1, 2006).
5. Perform early screening for hepatitis B, especially in children from endemic areas (Asia, the Pacific Islands, and Africa) and impoverished orphanages where health care was unlikely.
6. Newly arrived children may have been recently exposed to a vaccine-preventable disease. Immunization should still be considered and may even protect the child from illness, depending on the length of time from exposure. There is no evidence that recent disease exposure will increase the likelihood of an adverse event.
7. Ensure that household contacts of international adoptees are adequately vaccinated, especially for measles and hepatitis B. A 2004 measles outbreak occurred in King County due to importation of the virus by adoptees from China.

If in doubt, the best option is to re-immunize. There are limited data about records and countries of origin to guide providers' decisions about whether to titer or vaccinate. Consider the resources below when examining a foreign-born child's record.

Additional Resources:

- ACIP's *General Recommendations on Immunization*, <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5515a1.htm>
- WHO for country-specific immunization profiles and schedules http://www.who.int/immunization_monitoring/en/globalsummary/countryprofileselect.cfm
- American Academy of Pediatrics. Red Book. 2006 Report of the Committee on Infectious Diseases. 27th ed.
- Immunization Action Coalition: <http://www.immunize.org/adoption/>

¹ Hostetter MK. Infectious diseases in internationally adopted children: findings in children from China, Russia, and Eastern Europe. *Advances in Pediatric Infectious Diseases* 1999;14:147-61.

² Schulte JM, Maloney S, Aronson J, et al. Evaluating acceptability and completeness of overseas immunization records of internationally adopted children. *Pediatrics*. 2002; 109:e22.

2007-'08 WA State Vaccine Requirements for School

Several vaccine requirements for school attendance in Washington State have been expanded for 2007-'08:

1. **Hepatitis B: Three doses** are required for children entering Kindergarten through 10th grade.
2. **MMR: Two doses each of measles, mumps and rubella** are required for children entering Kindergarten through 12th grade. It is no longer acceptable to have only one dose each of mumps and rubella (and two measles-containing vaccines) as it was in 2006-'07.
3. **Varicella: Single dose** required for Kindergarten, 1st Grade and 6th grade entry. (*Note:* Two doses are now routinely recommended for individuals 12 months and older without evidence of immunity, per ACIP; see Varicella article on page 1).
4. **Tdap:** Required for children entering 6th grade **and** who are 11 years old, if they have not had a tetanus-containing vaccine within the past 5 years. (Continued, p.4)

Highlights

(2007-'08 WA State Vaccine Requirements..., continued from p. 3)

The 2007-'08 immunization requirements for school (by grade level) and childcare (by age) are available at the Washington State Department of Health website at:

<http://www.doh.wa.gov/cfh/immunize/schools.htm>

Information on the 2007-'08 school immunization requirements can also be heard on the Public Health - Seattle & King County Hotline by calling 206-296-4949.

Mark Your Calendars for CDC's Immunization Update 2007!

This year's live satellite CDC broadcast is scheduled for Thursday, August 9th, from 9:00am-11:30am. The course will provide the most current information on the rapidly changing field of immunization. The course will be held at the Region X Public Health Service in Seattle. Cost is \$5.00. CME/CNE/CEUs will be awarded to course participants who complete the training. The broadcast may also be accessible for online viewing.

Registration forms have been mailed to *VacScene* subscribers. For additional copies, visit:

<http://www.metrokc.gov/health/immunization/providers.htm#training> If you need more information, please call Ruby Lopez at Public Health-Seattle & King County (PHSKC), 206-296-4774.

New Hepatitis B Brochure Available!

Enclosed with this issue of the *VacScene* is a copy of the newly developed brochure, "**Start protecting your baby at birth with hepatitis B vaccine**". Its purpose is to inform parents about the importance of the hepatitis B birth dose and timely completion of the hepatitis B vaccine series. The majority of parents (89%) involved in pretesting the brochure for quality, readability, and messaging indicated that the brochure *strengthened their decision to have their newborn vaccinated at birth*.

The brochure was developed by Public Health – Seattle & King County, in collaboration with the Washington State Department of Health (WA DOH). The brochure will soon be available in Vietnamese. Health care professionals may place orders for additional copies of the brochure through WA DOH at: <https://fortress.wa.gov/prt/printwa/wsppt/default.asp> Follow the directions on the screen to order the brochure and other materials!

PHSKC is Moving!

Public Health's Prevention Division has moved to the New County Office Building, located at: **401 Fifth Ave., Suite 900, Seattle, WA 98104-2333**. The main Communicable Disease Epidemiology & Immunization PHSKC phone line (206-296-4774) will not change, but most staff phone numbers have changed. Calls will be redirected for the next three months – please make a note of the new address and phone numbers.